

Climatological Data for July, 1909.
DISTRICT No. 11, CALIFORNIA.

Prof. ALEXANDER G. MCADIE, District Editor.

SUMMARY.

In California, especially north of the Tehachapi, there were no noteworthy features. The month as a whole was one of pleasant weather and afternoon temperatures in the interior at no time exceeded 107°. The warmest day was the 13th, when in the San Joaquin Valley 107° was reached. In the southern counties warm spells on the 1st, 13th, and 14th occurred; and a temperature of 117° was reached in the Salton Desert section. This, however, is not as high as is ordinarily reached in that section at this time. On the other hand temperatures as low as 26° were recorded at Tamarack and Towie, Cal., on the 6th. Also in the portion of Oregon lying in District No. 11 a temperature of 26° was reached at Lakeview on the 7th and at Klamath Agency on the 18th, and the mean temperature of the whole month was notably low.

Throughout District No. 11 there was almost 100 per cent of the possible sunshine, and even along the coast there was less fog than usual.

Taken as a whole the month was somewhat below the normal in temperature and above the normal in precipitation.

ELECTRIC POWER LOAD DISPATCHING.

Mr. P. M. Downing, Engineer of Operation and Maintenance-of-Way of the Pacific Gas and Electric Company, has an interesting article in the Journal of Electricity, Power and Gas for July, 1909, page 89. The matter is worthy of note because the plant under consideration has a greater mileage of high voltage lines receiving power from a larger number of sources than any other plant in the world at the present time.

Ten hydroelectric power houses aggregating an installation capacity of about 67,000 kilo-watts run in parallel but are connected in with and receive power from The Northern California Power Company, The Great Western Power Company, The Stanislaus Power Company, The Snow Mountain Water and

Power Company, the steam stations at Oakland, San Jose and San Francisco and the gas engine station at Martin. This seemingly complex system is handled economically and simply in the following way: A load dispatcher with two assistants has a conveniently located office which is the center of operation of the entire system and from which every power house, switching station, etc., receives orders.

By means of reliable telephonic communication the load dispatcher can give orders to every important switching point. On a large diagrammatic board is shown every generating station, transmission line, substation or switching station, etc. As soon as the acknowledgment of an order to operate a switch is received, a dummy switch is set on the large board in the load dispatcher's office. In this way the load dispatcher can tell at a glance what is going on in the entire system of about 1600 miles of sixty kilo-volt lines.

This arrangement will appeal to all forecasters as being somewhat similar to the Weather Bureau system of receipt of messages at a central station and the use of symbols representing the display of weather warnings throughout the country at a given moment. The work of the load dispatcher may be considered as resembling that of the forecaster.

NOTE FROM THE RECLAMATION SERVICE IN CALIFORNIA.

W. W. SCHLECHT, Project Engineer.

The Orland Project contemplates the reclamation of 14,000 acres of land in the Sacramento Valley at, or near, Orland.

The storage dam, 127 feet high, is being built on Little Stony Creek, and will impound 46,000 acre-feet.

The distribution system will consist of 80 miles of canals and laterals.

The construction of the dam is well under way and the surveys of the distribution system are being made.

TABLE 1.—Climatological data for July, 1909. District No. 11, California.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, 0.1 inch or more.	Number of partly cloudy days.	Number of cloudy days.				
Oregon.																					
Klamath Agency.	Klamath.	1	56.4	-0.4	86	21	26	18	53	0.35	-0.25	0.0	2	22	6	3	sw.	H. G. Wilson.			
Klamath Falls.	do.	4,250	18	61.2	-0.4	88	21	31	7	43	0.32	+0.10	0.32	0.0	1	20	8	3	nw.		
Lakeview.	Lake.	4,825	24	65.9	-0.8	103	23	26	7	64	0.05	-0.24	0.05	0.0	1	24	3	4	s.		
Long Valley.	do.																	Cyrus L. Becroft.			
Merrill.	Klamath.	4,070	4	74.6		89	21	29	7	48	0.27	-0.29	0.27	0.1	1	16	8	6	nw.		
Yonna.	do.	4,148	1	59.0		90	14	29	7	52	0.51	-0.18	0.0	0.0	3	19	11	1	s.		
California.																		Agent, So. Pac. Co.			
Alturas.	Modoc.	5	62.8	-0.2	95	21	29	7	58	0.10	-0.16	0.08	0.0	2	24	6	1	sw.	Prof. C. B. Towle.		
Angiola.	Tulare.	208	9	76.3	-1.1	109	13	43	9	52	0.00	0.00	0.00	0.0	0	31	0	0	nw.	Agent, Santa Fe R.R.	
Antioch.	Contra Costa.	46	30	79.1	+3.3	104	12	62	5	52	0.00	0.00	0.00	0.0	0	31	0	0	w.	Agent, So. Pac. Co.	
Aptos.	Santa Cruz.	102	24	63.4	+1.1	78	11	52	30	0.00	-0.01	0.00	0.0	0	26	4	1	nw.	Do.		
Auburn.	Placer.	1,360	38	75.2	-1.6	103	12	50	3	39	0.00	-0.02	0.00	0.0	0	31	0	0	sw.	Do.	
Azusa.	Los Angeles.	540	7	70.6	-2.4	98	1	47	30	47	0.06	+0.06	0.06	0.0	1	27	4	0	....	A. F. Griffith.
Bagdad.	San Bernardino.	784	6	96.4	+0.2	116	1	73	6	34	0.00	-0.18	0.00	0.0	0	24	0	7	....	Agent, Santa Fe R.R.
Bakersfield.	Kern.	404	20	83.2	-5.4	108	20	58	13	37	0.00	-0.02	0.00	0.0	0	31	0	0	w.	Do.	
Barstow.	San Bernardino.	2,105	6	84.2	+2.0	114	1	51	7	46	T.	-0.13	T.	0.0	0	30	0	1	sw.	E. L. White.	
Beckwith.	Plumas.	5,005	1	64.1	-1.8	96	13	27	6	55	0.02	0.02	0.00	0.0	0	26	3	2	sw.	F. F. Peck.	
Berkeley.	Alameda.	317	22	62.8	+1.8	83	11	51	1	26	0.00	-0.04	0.00	0.0	0	29	0	2	sw.	State University.	
Biggs.	Butte.	98	10	76.9	-1.8	102	12	60	51	....	0.00	0.00	0.00	0.0	0	31	0	0	s.	Agent, So. Pac. Co.
Bishop.	Inyo.	4,450	14	63.3	-3.8	93	21	37	1	51	0.43	-0.43	0.00	0.0	1	27	2	2	nw.	W. A. Chalfont.	
Blockburg.	Humboldt.	1,700	3	63.3	-3.8	87	13	34	6	40	0.00	0.00	0.00	0.0	0	30	0	1	....	Victor Hope.
Blue Canon.	Placer.	4,695	10	62.2	-3.8	114	1	58	28	49	0.00	0.00	0.00	0.0	0	27	0	4	sw.	Agent, So. Pac. Co.	
Blythe.	Riverside.	3,500	2	75.0	-3.5	104	13	42	6	49	0.00	-0.21	0.07	0.0	2	23	8	0	sw.	H. V. Blenkiron.	
Branscomb.	Mendocino.	2,000	9	61.8	-4.6	93	14	38	4	42	0.10	-0.03	0.10	0.0	0	30	1	0	n.	A. J. Haun.	
Bravley.	Imperial.	-105		89.4	-1.1	115	1	61	23	43	0.34	-0.34	0.00	0.0	1	21	9	1	se.	U. S. Weather Bureau.	
Brush Creek.	Butte.	2,140	5	69.2	-4.1	104	12	40	6	52	T.	0.00	T.	0.0	0	29	2	0	s.	Cal. Gas & Electric Co.	
Calexico.	Imperial.	0	4	90.3	-1.1	111	1	68	8	36	0.00	0.00	0.00	0.0	0	27	0	4	se.	J. E. Peck.	
Caliente.	Kern.	1,290	23	62.7	-2.7	100	12	50	11	....	0.00	-0.02	0.00	0.0	0	31	0	0	....	Agent, So. Pac. Co.
Calistoga.	Napa.	363	37	69.9	-2.9	104	12	40	47	....	0.00	-0.02	0.00	0.0	0	31	0	0	nw.	Do.
Campbell.	Santa Clara.	217	12	62.0	-2.9	95	12	40	47	....	0.00	-0.02	0.00	0.0	0	30	0	1	w.	F. M. Righter.
Camptonville (near).	Yuba.	3,500	2	75.0	-3.5	104	13	42	6	49	0.00	-0.21	0.07	0.0	2	23	8	0	sw.	S. B. Johnson.	
Cedarville.	Modoc.	4,675	15	65.7	-3.5	95	27	35	6	49	0.09	-0.21	0.07	0.0	0	29	2	0	s.	T. H. Johnston.	
Chico.	Butte.	189	39	77.8	-6.1	105	12	50	18	47	0.00	-0.04	0.00	0.0	0	29	1	1	w.	Agent, Butte R. R. Co.	
Chino.	San Bernardino.	714	17	76.8	-6.3	101	1	60	121	....	0.00	-0.04	0.00	0.0	0	29	1	1	w.	Agent, So. Pac. Co.
Cisco.	Placer.	5,939	38	70.0	+6.8	95	12	38	5	....	0.00	-0.03	0.00	0.0	0	31	0	0	....	F. P. Brackett.
Clarendon.	Los Angeles.	1,200	17	73.0	+1.4	98	1	50	15	44	0.11	+0.06	0.10	0.0	2	24	6	1	n.	Lloyd Browne.	
Cloverdale.	Sonoma.	340	7	71.2	-1.1	105	11	42	19	50	0.00	-0.01	0.00	0.0	0	31	0	0	....	Agent, So. Pac. Co.
Colfax.	Placer.	2,421	38	75.1	-0.2	100	13	50	5	35	0.00	-0.03	0.00	0.0	0	30	0	0	....	W. K. De Jarnatt.
Colusa.	Colusa.	60	6	75.1	-1.6	106	12	53	19	....	0.00	-0.00	0.00	0.0	0	31	0	0	....	Agent, So. Pac. Co.
Corning.	Tehama.	277	23	85.9	+2.5	103	12	65	51	....	0.00	-0.00	0.00	0.0	0	27	3	1	s.	Do.
Cuyamaca (1).	San Diego.	4,677	10	72.2	+7.2	91	2	48	27	29	0.18	-0.21	0.13	0.0	3	25	4	2	e.	L. L. Macquarie.	
Daunt.	Tulare.	4,000	2	60.2	-5.7	104	12	41	6	37	0.00	-0.02	0.00	0.0	0	31	0	0	....	D. L. Wishon.
Davisville.	Yolo.	51	37	72.2	-5.7	104	12	46	26	50	0.00	-0.05	0.00	0.0	0	29	2	0	....	S. H. Beckett.
Deer Creek.	Nevada.	3,700	2	63.4	-1.1	91	13	32	7	45	0.00	-0.05	0.00	0.0	0	29	2	0	....	Cal. Gas & Electric Co.
Delta.	Shasta.	1,138	24	74.4	-4.5	106	14	45	6	47	0.25	+0.12	0.15	0.0	2	18	12	1	s.	Agent, So. Pac. Co.	
Denair.	Stanislaus.	126	9	69.8	-6.3	103	12	40	17	57	0.00	-0.00	0.00	0.0	0	31	1	0	nw.	T. H. Johnston.	
Dobbins.	Yuba.	1,850	5	75.9	-5.1	104	11	48	6	40	0.00	-0.00	0.00	0.0	0	31	1	0	....	Bishop & Taylor.
Dudley.	Mariposa.	3,000	64	4	-0.4	94	14	34	6	49	0.00	-0.00	0.00	0.0	0	30	1	0	nw.	W. H. Dudley.	
Dunnigan.	Yolo.	65	32	86.0	+4.2	105	12	74	19	....	0.00	-0.00	0.00	0.0	0	31	0	0	n.	Agent, So. Pac. Co.
Dunsmuir.	Siskiyou.	2,285	20	73.3	+3.8	97	15	52	5	....	0.12	-0.14	0.12	0.0	1	30	1	1	s.	R. W. Durham.
Durham.	Butte.	160	14	75.8	-3.6	106	12	49	20	46	0.00	-0.05	0.00	0.0	0	29	1	1	sw.	H. H. Kessler.	
El Cajon.	San Diego.	482	10	70.8	-0.5	96	1	47	47	47	0.00	-0.10	0.00	0.0	0	31	0	0	....	Cal. Gas & Electric Co.
Electra.	Amador.	225	5	78.8	-2.7	107	1	47	7	50	0.00	-0.00	0.00	0.0	0	31	0	0	....	Agent, So. Pac. Co.
Elaine.	Riverside.	1,234	15	75.7	-2.7	107	1	47	7	50	0.00	-0.03	0.00	0.0	0	30	1	0	w.	A. R. Moon.	
Emigrant Gap.	San Diego.	5,230	35	80.8	-6.3	100	11	49	7	42	0.00	-0.00	0.00	0.0	0	31	0	0	....	U. S. Weather Bureau.
Escondido.	San Joaquin.	64	23	55.6	+0.3	63	10	49	18	11	0.55	+0.44	0.45	0.0	6	1	23	0	0	nw.	Agent, So. Pac. Co.
Eureka.	Sacramento.	111	30	80.4	+2.2	102	12	59	5	....	0.00	-0.01	0.00	0.0	0	31	0	0	....	F. O. Hutton.
Farmington.	Placer.	252	37	77.2	-4.7	108	12	50	6	50	0.00	-0.01	0.00	0.0	0	30	1	0	s.	E. E. Roening.	
Folsom.	Nevada.	6,500	14	57.4	-2.6	80	12	35	71	....	0.00	-0.20	0.00	0.0	0	30	1	0	....	H. S. Green.
Fordyce Dam.	Colusa.	1,650	5	68.6	-2.6	98	12	40	5	46	0.00	-0.28	0.00	0.0	0	31	0	0	w.	U. W. Weather Bureau.	
Fouts Springs.	Fresno.	293	22	79.3	-2.7	107	13	54	6	41	0.00	-0.00	0.00	0.0	0	31	0	0	s.	Agent, So. Pac. Co.	
Fruto.	Glenn.	624	20	50.0	-1.9	106	12	60	19	....	0.00	-0.00	0.00	0.0	0	31	0	0	s.	Do.
Galt.	Sacramento.	49	31	56.6	-3.4	92	11	42	17	48	0.00	-0.01	0.00	0.0	0	31	0	0	n.	C. M. Fitzgerald.	
Georgetown.	El Dorado.	2,650	36	70.5	+1.7	100	20	55	19	....	0.00	-0.00	0.00	0.0	0	31	0	0	....	Agent, So. Pac. Co.
Gilroy.	Santa Clara.	193	35	77.4	-1.1	96	15	43	5	32	0.00	-0.00	0.00	0.0	0	30	0	1	n.	Do.	
Gold Run.	Monterey.	127	10	57.0	-2.9	90</															

TABLE 1.—Climatological data for July, 1909. District No. 11—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.					
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Greatest daily range.	Date.	Departure from the normal.	Greatest in 24 hours.	Total.	Total snowfall unmeasured.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
<i>California—Cont'd.</i>																			
Los Banos*	Merced.	121	22	76.0	- 5.5	99	12	60	4†	0.00	- 0.01	0.00	0.0	0	31	0	0	w.	
Los Gatos.	Santa Clara.	600	23	66.5	- 1.2	100	12	45	4†	45	0.00	0.00	0.0	0	31	0	1	n.	
Macdoel.	Siskiyou.	4,258	2	58.6	.....	91	2†	29	18	52	0.42	0.42	0.0	1	23	5	1	nw.
Madeline.	Lassen.	5,270	.....	59.4	.....	94	14	28	29	58	0.08	0.08	0.0	0	30	1	1	w.
Magalia.	Butte.	2,321	5	63.4	- 6.3	102	12	41	20	T.	- 0.00	T.	0.0	0	30	1	0	n.	
Mammoth Tank.	Imperial.	257	31	94.0	- 4.5	117	1	72	6	41	0.00	- 0.06	0.00	0	26	3	3	e.	
Marysville.	Yuba.	67	73	78.8	- 6.2	101	15	42	2	52	0.00	0.00	0.0	0	31	0	0	se.	
Mecca.	Riverside.	-185	3	88.8	.....	110	21	60	27	39	0.00	0.00	0.0	0	29	2	2	nw.
Menlo Park*.	San Mateo.	64	31	68.2	+ 0.5	90	12	52	5†	8†	0.00	- 0.01	0.00	0	31	0	0	nw.	
Merced.	Merced.	173	35	77.2	- 4.5	105	10†	50	5	41	0.00	- 0.01	0.00	0	31	0	0	w.	
Mill Creek (1).	Amador.	.....	2	70.1	.....	90	12†	42	6	38	0.00	0.00	0.0	0	27	4	0	nw.
Milton (near).	Calaveras.	660	19	76.2	- 2.4	103	12	52	6	44	0.00	0.00	0.0	0	27	4	0	nw.	
Modesto*.	Stanislaus.	90	37	.....	.....	.....	.....	.....	.....	.....	0.00	- 0.01	0.00	0	31	0	0	.....
Mojave.	Kern.	2,751	32	78.1	- 7.6	104	24	51	29	46	0.00	- 0.08	0.00	0	30	0	1	.....
Mokelumne Hill.	Calaveras.	1,550	16	74.3	- 1.5	99	12	50	5†	30	0.00	0.00	0.0	0	31	0	0	.....
Mono Ranch.	Ventura.	3,210	55	66.2	.....	92	1	40	7	38	0.00	0.00	0.0	0	31	0	0	w.
Montague.	Siskiyou.	2,450	21	68.2	- 11.2	97	2†	40	5†	54	1.12	+ 1.05	1.12	0	1	20	6	5	n.
Monterey*.	Monterey.	15	44	59.6	- 1.4	68	13†	52	1†	.....	0.00	0.00	0.0	0	31	0	0	e.
Monterey.	Kern.	4,500	10	74.0	.....	98	2†	44	4†	36	0.00	- 0.08	0.00	0	31	0	0	nw.
Monumental.	Del Norte.	4	59.8	80	14	36	6	44	1.80	1.10	0	4	20	8	5
Mount Tamalpais.	Marin.	2,375	10	67.6	.....	92	12	43	5	33	0.00	- 0.01	0.00	0	29	2	0	nw.
Napa City.	Napa.	20	32	64.6	- 1.2	91	20	43	3	41	0.00	- 0.01	0.00	0	30	1	0	s.	
Napa (S. H.).	..... do.	60	31	66.6	+ 0.8	97	12	49	1†	41	0.00	- 0.01	0.00	0	30	1	0	sw.
Needles.	San Bernardino.	477	17	89.5	- 4.9	115	1	60	10	43	1.40	+ 0.98	1.40	0	1	24	5	2	s.
Nevada City.	Nevada.	2,580	17	67.5	- 1.1	97	30	36	6	50	T.	- 0.03	T.	0	0	30	1	0	sw.
Newcastle.	Placer.	970	16	75.6	- 4.6	106	12	51	9	47	0.00	- 0.01	0.00	0	31	0	0	nw.	
Newhall*.	Los Angeles.	1,200	32	72.6	- 4.0	108	20	60	5†	.....	0.00	0.00	0.0	0	28	1	2	se.
Newman.	Stanislaus.	91	20	75.0	- 9.6	102	13†	48	6	43	0.00	- 0.01	0.00	0	31	2	2	n.	
Nimshew.	Butte.	2,500	5	70.0	.....	99	12	41	6	43	0.00	0.00	0.0	0	27	0	0	.....
North Bloomfield.	Nevada.	3,200	12	70.7	.....	96	17	40	2	.....	0.00	0.00	0.0	0	27	4	0	w.
North Fork.	Madera.	3,000	5	69.9	.....	102	18	31	6	60	0.00	0.00	0.0	0	27	4	0	n.
Oakdale*.	Stanislaus.	156	15	76.5	- 3.2	103	12†	53	6	44	0.00	0.00	0.0	0	31	0	0	nw.	
Oakland.	Alameda.	36	33	63.8	+ 2.0	80	12	51	4	29	T.	- 0.02	T.	0	0	14	3	3	chabot observatory.
Ojai Valley.	Ventura.	900	3	68.7	.....	100	1	44	7†	47	0.00	0.00	0.0	0	29	1	1	w.
Orland.	Glenn.	254	27	79.3	- 7.1	107	12†	53	5	44	0.00	- 0.02	0.00	0	29	2	0	se.	
Orleans.	Humboldt.	520	6	74.8	- 5.9	105	14†	48	4	52	0.42	+ 0.17	0.42	0	1	26	4	1	n.
Oroville (near).	Butte.	250	25	78.1	- 3.2	110	11	52	4	43	0.00	- 0.03	0.00	0	27	4	0	nw.	
Palermo.	..... do.	213	18	76.6	- 2.3	108	12	49	6	48	0.00	- 0.04	0.00	0	29	2	0	s.
Palm Springs*.	Riverside.	534	20	91.3	- 8.4	112	11†	70	26	.....	0.00	- 0.03	0.00	0	30	0	0	w.
Pasadena.	Los Angeles.	827	19	71.1	- 3.0	98	1	47	29	44	0.12	+ 0.12	0.12	0	1	27	3	1	sw.
Paso Robles*.	San Luis Obispo.	800	22	68.8	- 3.7	103	25	36	18	58	0.00	0.00	0.0	0	30	1	0	nw.	
Peachland.	Sonoma.	190	13	65.7	- 0.3	101	15	38	4	59	0.00	- 0.01	0.00	0	30	1	0	s.	
Penstock Camp.	Tuolumne.	3,750	2	75.0	.....	96	1†	41	5	45	0.00	0.00	0.0	0	24	7	0	w.
Pine Crest.	Santa Barbara.	1,000	11	65.2	- 2.6	86	1	49	30	28	0.00	- 0.05	0.00	0	28	3	0	sw.	
Placerville.	El Dorado.	1,875	20	69.0	- 3.7	98	13	40	7	44	0.00	- 0.02	0.00	0	31	0	0	w.	
Point Lobos.	San Francisco.	250	16	57.2	+ 1.2	80	1	49	3†	28	0.00	- 0.01	0.00	0	30	5	21	nw.	
Point Reyes.	Marin.	490	17	51.9	.....	61	20	44	26	14	0.00	0.00	0.0	0	12	9	10	nw.
Porterville.	Tulare.	464	20	77.9	- 10.2	106	13	48	6	41	0.00	- 0.06	0.00	0	31	0	0	.....
Poway.	San Diego.	460	35	71.0	+ 3.0	102	1	51	30	43	0.00	0.00	0.0	0	29	2	0	w.	
Quincy.	Plumas.	3,400	14	63.2	- 3.7	93	12†	33	6	52	T.	- 0.03	T.	0	0	29	2	0	sw.
Red Bluff.	Tehama.	307	32	79.6	- 2.5	106	11	57	6	39	T.	- 0.03	T.	0	0	29	2	0	se.
Redding.	Shasta.	552	34	79.2	- 3.1	103	13†	57	5†	36	0.00	- 0.09	0.00	0	29	2	0	nw.	
Redlands.	San Bernardino.	1,352	16	74.9	- 3.4	102	1	51	28	44	T.	- 0.04	T.	0	0	26	4	1	w.
Reedley.	Fresno.	347	9	70.1	- 3.1	107	13	52	6	45	0.00	0.00	0.0	0	31	0	0	n.	
Rialto (near).	San Bernardino.	2,250	3	74.0	- 2.3	104	1	51	15†	43	0.00	- 0.02	0.00	0	23	8	0	se.	
Riverside.	Placer.	249	38	74.0	- 6.0	105	12	47	6	49	0.00	- 0.03	0.00	0	31	0	0	s.	
Rocklin.	Humboldt.	75	6	59.0	.....	70	9†	43	1	23	0.22	0.22	0.00	1	19	9	3	n.
Rohnerville.	El Dorado.	71	32	71.9	- 0.6	101	12	53	19	38	0.00	0.00	0.0	0	31	0	0	s.	
Sacramento (1).	Sacramento.	35	56	69.9	- 3.7	95	12	50	6	36	0.00	- 0.03	0.00	0	30	1	0	s.	
Sacramento (2).	..... do.	35	56	69.9	.....	106	12	41	6	52	0.00	0.00	0.0	0	31	0	0	s.
St. Helena.	Monterey.	40	35	59.6	- 3.1	75	7	42	27	26	0.00	0.00	0.0	0	21	10	0	w.	
Salinas.	San Bernardino.	1,054	17	75.4	+ 0.4	103	1	47	8	52	0.00	- 0.04	0.00	0	20	11	3	sw.	
San Bernardino.	San Diego.	93	38	65.1	- 1.8	79	1	58	7	16	T.	- 0.01	T.	0	0	18	10	3	sw.
San Diego.	San Francisco.	207	38	57.8	+ 0.5	77	12	49	2	24	T.	- 0.03	T.	0	0	23	5	3	w.
San Francisco.	San Jacinto.	1,550	16	76.4	+ 0.2	104	1†	47	6†	51	0.18	+ 0.10	0.18	0	1	29	3	0	nw.
San Jose.	Santa Clara.	95	34	63.8	- 3.1	95	12	43	4	44	0.00	0.00	0.00	0	31	0	0	nw.	
San Leandro.	Alameda.	48	14	62.4	- 1.7	86	12	47	17	38	T.	- 0.01	T.	0	0	26	5	1	w.
San Luis Obispo.	San Luis Obispo.	201	14	62.2	- 1.0	93	11	44	4	33	0.00	0.00	0.00	0	24	6	1	nw.	
San Mateo*.	San Mateo.	23	35	68.4	+ 3.0	86	12	58	8	38	0.00	0.00	0.00	0	30	0	0	nw.	
San Miguel*.	San Luis Obispo.	610	32	76.5	+ 1.5	99	12	51	31	52	0.00	0.00	0.00	0	25	6	0	.....
Sanger*.	Fresno.	371	20	78.9	- 9.0	83	1	50	4†	24	T.	- 0.02	T.	0	0	17	14	0	nw.
Santa Barbara.	Santa Barbara.	130	25	63.4	- 1.7	83	1	4											

TABLE 1.—*Climatological data for July, 1909. District No. 11—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, 0.1 inch or more.	Number of clear days.		
<i>California—Cont'd.</i>																		
Tracy*	San Joaquin	64	29	74.2	— 5.7	99	13	60	2	... 0.00	— 0.01	0.00	0.0	0	31	0	nw.	Agent, So. Pac. Co.
Tulare (near)	Tulare	274	15	76.2	— 6.8	101	13	52	7	38 0.00	— 0.02	0.00	0.0	0	31	0	w.	J. T. Bearass.
Ukiah	Mendocino	620	16	68.9	— 4.5	102	14	41	19	50 0.04	— 0.01	0.04	0.0	1	29	2	0	Dr. George McCowen.
Upland	San Bernardino	1,750	13	73.2	+ 0.1	98	1	50	6†	39 0.05	— 0.04	0.05	0.0	1	29	2	0	A. P. Harwood.
Upper Lake	Lake	1,350	24	72.4	— 0.7	102	14	48	6	46 0.00	— 0.03	0.00	0.0	0	31	0	0	C. M. Hammond.
Vacaville	Solano	175	21	72.4	— 4.0	105	12	46	6	50 0.00	— 0.00	0.00	0.0	0	31	0	0	G. O. Coburn.
Valley Springs*	Calaveras	673	20	76.8	— 4.2	104	13	53	6†	... 0.00	— 0.03	0.00	0.0	0	30	1	0	Agent, So. Pac. Co.
Visalia	Tulare	334	21	79.6	— 1.5	100	24	58	5	33 0.00	— 0.03	0.00	0.0	0	31	0	0	Agent, Santa Fe R. R.
Warner Springs	San Diego	3,185	1	71.1	— 3.3	94	1†	42	5	38 1.26	— 1.00	0.00	0.0	3	28	5	0	Mrs. F. S. Stanford.
Wasco	Kern	336	9	78.6	— 3.3	107	14	50	7†	48 0.00	— 0.00	0.00	0.0	0	31	0	0	Agent, Santa Fe R. R.
Watsonville	Santa Cruz	23	13	57.0	— 6.3	75	6†	43	17†	30 0.00	— 0.00	0.00	0.0	0	10	21	0	Spreckles Sugar Co.
Westley*	Stanislaus	90	20	55.7	+ 2.6	103	12	67	7	... 0.00	— 0.03	0.00	0.0	0	31	0	0	Agent, So. Pac. Co.
Wheatland	Yuba	84	22	74.4	+ 2.8	100	12†	49	6	40 0.00	— 0.01	0.00	0.0	0	31	0	0	Wm. Lumbard.
Willows	Glenn	136	30	75.4	— 7.5	105	13	52	19	39 0.00	— 0.00	0.00	0.0	0	31	0	0	M. T. Harrington, jr.
Yosemite	Marioposa	3,945	5	67.6	.....	98	13	35	5	56 0.00	— 0.00	0.00	0.0	0	31	0	0	C. W. Tucker.

* Temperature extremes are from observed readings of the dry-bulb; means are computed from observed readings.

** Precipitation included in that of the next measurement.

† Also on other dates.

‡ Data are from standard instruments not supplied by the U. S. Weather Bureau.

§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

|| Estimated by observer.

||| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

TABLE 2.—*Daily precipitation for July, 1909. District No. 11, California.*

TABLE 2.—*Daily precipitation for July, 1909. District No. 11—Continued.*

TABLE 2.—*Daily precipitation for July, 1909. District No. 11—Continued.*

TABLE 3.—Maximum and minimum temperatures at selected stations for July, 1909. District No. 11, California.

Date.	Lakeview, Oreg.		California.																								Red Bluff.	
			Alturas.		Barstow.		Brawley.		Colusa.		Eureka.		Fresno.		Independence.		Los Angeles.		Mount Tamalpais.		Nevada City.		Porterville.		Red Bluff.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1...	96	42	92	39	114	72	83	46	115	80	95	57	59	51	102	63	101	63	89	65	80	62	95	49	100	61	100	64
2...	94	45	95	42	108	74	80	45	108	85	93	61	56	51	105	67	100	65	87	64	75	59	94	52	103	62	99	66
3...	100	46	90	41	108	72	75	40	104	80	83	55	57	53	98	61	97	70	82	61	72	56	93	49	98	64	93	62
4...	94	43	87	37	103	70	56	38	106	78	82	56	62	52	91	80	96	66	74	58	61	45	80	41	91	51	83	61
5...	88	37	76	40	92	63	61	43	103	65	84	55	60	52	77	56	91	54	75	61	58	43	70	46	81	50	76	57
6...	70	31	67	36	93	54	67	39	102	64	84	54	58	53	86	54	84	51	74	58	68	49	77	36	85	48	82	57
7...	80	26	80	29	96	51	75	40	103	65	88	60	59	51	92	56	89	52	75	58	77	59	86	40	91	55	90	65
8...	86	38	82	37	99	59	81	45	107	64	88	57	57	53	95	60	89	55	72	57	72	59	84	43	94	57	89	62
9...	81	40	79	41	100	63	81	45	104	63	87	56	60	52	94	60	91	56	74	57	72	54	83	45	94	50	89	64
10...	77	44	79	44	100	66	82	44	105	67	89	58	63	52	93	61	92	62	75	58	71	55	84	46	96	56	92	66
11...	87	40	83	44	105	63	86	46	109	68	95	62	59	54	98	65	100	60	77	59	79	59	91	49	98	60	97	70
12...	89	44	91	39	110	65	88	46	110	69	103	68	57	52	104	69	102	70	77	59	92	75	96	54	102	65	105	76
13...	101	46	91	43	110	70	90	49	111	69	98	69	58	51	107	66	101	62	73	59	85	69	98	53	106	68	106	77
14...	95	44	94	46	109	69	93	55	113	75	97	61	56	50	102	64	98	69	76	59	82	66	98	53	101	65	104	70
15...	100	44	93	47	105	66	83	51	108	74	97	60	60	50	103	66	97	60	77	59	83	63	95	50	102	65	103	71
16...	93	43	89	39	105	66	80	47	107	76	89	61	58	52	100	63	96	60	75	58	74	61	89	51	99	64	92	71
17...	93	39	84	37	105	67	74	40	102	79	87	57	59	53	96	57	94	60	78	58	71	56	85	45	95	55	90	63
18...	90	40	83	30	103	68	86	38	104	81	90	59	59	49	96	56	83	60	80	58	76	57	89	41	96	55	92	62
19...	91	38	84	42	105	65	74	39	105	75	87	53	60	53	90	57	94	55	76	59	77	53	81	43	92	54	84	59
20...	94	57	84	37	105	65	80	40	109	73	93	55	58	53	95	56	92	56	80	58	70	58	89	40	92	53	98	60
21...	93	46	95	37	104	69	85	46	112	72	96	57	59	51	101	63	95	58	78	58	81	68	92	48	101	61	98	63
22...	102	50	93	45	106	62	86	45	100	80	93	56	61	53	102	64	97	62	77	58	82	69	94	50	100	64	98	65
23...	103	52	92	43	106	75	87	47	106	78	96	63	60	53	105	68	95	61	75	58	82	71	94	48	104	64	100	70
24...	100	45	91	43	106	70	88	49	109	78	97	62	60	53	104	68	97	64	76	58	84	69	94	47	103	67	101	70
25...	101	37	87	40	98	75	86	46	105	80	93	62	60	52	100	68	94	63	73	59	77	54	92	47	100	63	95	70
26...	85	42	78	48	97	69	72	43	103	67	85	56	59	54	89	59	88	53	72	59	64	49	78	45	89	59	83	63
27...	68	31	72	40	92	61	61	43	101	67	86	56	59	53	92	57	85	52	72	59	73	56	85	54	87	56	93	63
28...	79	34	84	33	96	58	86	44	104	61	96	60	60	55	96	62	87	58	70	58	80	65	88	43	96	56	95	63
29...	85	41	88	37	99	56	85	43	108	66	86	60	58	55	100	61	91	56	77	53	76	65	92	45	99	56	98	67
30...	90	43	90	37	103	63	86	45	108	71	91	60	58	53	99	61	93	56	81	55	72	63	97	47	102	63	94	63
31...	91	43	89	41	103	65	86	47	108	74	91	55	60	53	95	62	92	57	79	53	75	63	90	47	96	62	95	62
Mns.	90.2	41.6	85.9	39.8	102.8	65.5	79.2	44.3	106.4	72.3	91.3	58.9	59.0	52.3	97.0	61.7	93.9	59.4	76.8	58.6	75.5	50.6	88.7	46.3	96.6	59.2	93.8	65.3

Date.	Redlands.		Sacramento.		San Diego.		San Francisco.		San Jose.		San Luis Obispo.		Santa Barbara.		Santa Rosa.		Siskion.		Stockton.		Summit.		Savanneville.		Yosemite.		
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1...	102	66	94	57	79	63	68	50	86	45	90	51	83	59	88	42	83	34	93	53	78	44	88	45	96	48	
2...	97	70	85	56	69	62	59	50	71	51	70	50	58	51	80	47	84	45	88	60	81	49	91	51	95	51	
3...	95	65	80	56	69	62	59	50	71	49	70	49	78	55	80	43	82	41	84	56	81	49	88	44	94	52	
4...	89	58	73	53	67	60	61	51	70	43	69	44	70	70	50	77	42	73	35	73	56	84	37	89	46		
5...	84	56	75	53	68	60	62	52	70	51	72	50	72	52	74	44	73	34	73	56	86	37	84	35	85	35	
6...	89	52	79	51	66	60	69	52	78	44	80	52	74	52	83	44	62	52	66	28	71	34	87	40	91	40	
7...	88	52	87	53	66	58	71	53	85	46	80	49	70	54	84	48	71	41	87	56	73	33	77	38	87	37	
8...	89	56	82	54	68	59	55	51	73	52	69	50	66	56	78	44	77	42	82	56	71	37	79	46	86	40	
9...	87	53	83	55	66	60	60	50	74	54	71	49	68	55	89	44	71	47	84	56	71	31</					